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TOPOGRAPHIC MAPS

One basic requirement for the assessment and utilization of natural resources of a region is an up-to-date large-scale topographic map. Such a map is the control upon which every type of regional or detailed data is plotted and evaluated. Fishermen, hunters, hikers, prospectors, and rock hounds, among others, find topographic maps indispensable in finding their way about in unfamiliar areas, and in relocating points previously visited.

A topographic map is one that gives an expression of the land surface. The most easily understandable type of topographic map is a relief model like the one-eighth-mile-long map of California in the Ferry Building in San Francisco. Such a model, however, is not only expensive, but cannot be easily moved. Some means therefore had to be developed to express topography on a sheet of paper which could be printed and distributed to thousands of people. Symbols such as shading, hachures, and contour lines were developed to indicate relief maps. Contours are the most commonly used because of the accuracy with which the elevation of any point in the mapped area may be determined.

Topographic maps show natural as well as cultural features, such as roads and buildings.

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The January and April 1953 numbers of the CALIFORNIA JOURNAL OF MINES AND GEOLOGY, which are being combined under one cover as a double-sized issue, will be released about April 15, 1953. This issue will contain a 450-page report on San Bernardino County mines and mineral deposits, and the Annual Report of the State Mineralogist.

A contour is an imaginary line on the ground, which is always at the same elevation above sea level. The shore-line of a lake describes a contour. If the shore-line of a given lake were plotted, one would have two contours with a vertical difference in elevation, or contour interval of 5 feet. Where the water was rising on a steep bank the shore-line contours would be spaced closely; but where the water was rising along a nearly flat valley floor they would be far apart.

The most commonly used topographic maps are those published by the United States Geological Survey. Contours, sometimes supplemented by shading, are shown on these maps, the contour intervals ranging from 1 foot to 250 feet.

Three general classes of information are shown on most topographic maps: contours of the land surface, which are usually printed in brown; the water features are usually printed in blue; and the works of man, such as buildings, which are usually printed in black. Some of the more recent maps show also land subdivisions printed in red and forest cover printed in green.

Most topographic maps are rectangular, being bounded by lines of latitude and longitude with the same number of minutes on each side; these maps are known as quadrangle maps. However, special